

Research in National Parks

ROBERT J. BAKER and HUGH H. GENOWAYS, Texas
Tech University, Lubbock

This was our first involvement with research in the National Parks and we would like to make some observations concerning interactions among basic researchers, park personnel, and the philosophy on which our park systems are based. Our conclusions are not based only on our own experiences, but also on conversations with other basic researchers (especially those who contributed to this symposium) and with park personnel who have aided and worked with other researchers who were not employed by the National Park Service.

The National Parks are excellent places to conduct some types of basic research. A prerequisite for any research in a National Park is that it must not be detrimental to the park or to the basic goals of the park. If a plan for basic research harmonizes with the park's ecosystem and goals, the worker has several things to his advantage: (1) There generally are good records concerning the history of the park relative to human impact, weather, and past management plans. Such records are extremely valuable to many types of biological investigations. (2) Human interference generally can be controlled by proper site selection and with the aid of park personnel. (3) Park personnel are an extremely valuable adjunct to research. We were assisted in many ways, but their understanding of the biology of the park, logistical support, and observations during our study were the most notable. We never found park personnel less than cooperative. (4) Ecosystems within the park boundary often are less altered than comparable sites on private and other types of public lands. (5) Long range studies can be set up with reasonable assurance that they can be carried to completion.

The above are some of the advantages that research within the park offers to the basic researcher. Some comments are needed relative to what value such research is to the park and to the responsibility of the basic researcher to the park. Basic research adds to knowledge of our natural resources and our national heritage within the park. Such data always are valuable when preparing an inventory or establishing goals for a specific park. However, we found most of the basic researchers unaware of the need to communicate knowledge from basic research to park personnel so that it can be used in

park planning. Researchers conducting basic biological research within park boundaries are the best qualified personnel to evaluate the nature and value of the park's biological systems. This is not to say that researchers should set park policy, but it is essential that their findings are available to park personnel who are responsible and trained to set park policies and goals.

The subject of this symposium is a park rich in unique biological systems and situations that are of considerable esthetic and educational value to park visitors. A delicate balance must be achieved between meeting the needs and wishes of the general public and protecting the fragile nature of the ecosystem. At the present time, most of the park is accessible only by walking and it seems best that a considerable portion remains that way. The establishment of a biological preserve that will protect and harbor many of the unique species of the park also should be considered. During and following the symposium it became apparent that most participants would welcome an educational plan to aid visitors in enjoying the park, although there was no general agreement as to what that plan should be. However, this was a "first meeting" of the group and many ideas were undergoing the refinement of discussion and counter-discussion. If a group (probably consisting of 5 to 10 park personnel with an equal number of outside scientists) worked on such an educational plan over several meetings, a feasible plan with alternatives probably would result.